Information Renaissance
P.O. Box 7188
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October 17, 1996

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
Room 222
1919 M Street, NW
Washington, DC 20554



Dear Mr. Secretary:

Enclosed is the original set of further comments relating to questions #9 and #15 of the FCC's Public Notice of July 3, 1996, in the matter of the Federal-State Joint Board on Universal Service, CC Docket No. 96-45. Nine copies are provided for distribution to Commission members and staff. These comments are respectfully submitted on behalf of Information Renaissance, a nonprofit organization which seeks to further the development of computer networks in support of education, community development and economic revitalization. We appreciate your consideration of these comments.

Sincerely,

Robert D. Carlitz

Robert D. Carlitz
Executive Director
Information Renaissance



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**Before the**
**Federal Communications Commission**
**Washington, DC 20554**



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| In the Matter of | ) | |
| | ) | |
| Federal-State Joint Board on | ) | CC Docket No. 96-45 |
| Universal Service | ) | |
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**Re: Notice of Proposed Rulemaking**
**and Order Establishing Joint Board**

# Further Comments from Information Renaissance on Questions #9 and #15

*prepared by*

Robert D. Carlitz

(October 17, 1996)

This note addresses questions #9 and #15 in the FCC's request for further comments on CC Docket 96-45, In the Matter of Universal Service.

Question #9 asks:

> *How can universal service support for schools, libraries, and health care providers be structured to promote competition?*

and question #15 asks:

> *What is the least administratively burdensome requirement that could be used to ensure that requests for supported telecommunications services are bona fide requests within the intent of section 254(h)?*

Information Renaissance bases its responses on its experience with school and community networking projects in Pittsburgh and on the content of on-line discussions that occurred in the course of the recent Universal Service/Network Democracy on-line seminar. That seminar involved the participation of over 500 people, representing every state in the country and including teachers and librarians with over 2000 person-years of experience in the application of telecommunications technologies to education. An archive of materials relating to the seminar can be found on-line at

http://info-ren.pitt.edu/universal-service

We believe that the desire to foster competition in the provision of telecommunications services is one of the most important - but also likely one of the most elusive - features of the Telecommunications Act of 1996. True competition can speed the introduction of new technologies and services and provide dramatically lower prices for traditional and newly innovative telecommunications services. But we know of no examples which suggest that such competition will result without considerable public pressure to bring it about. It is far too easy for monopolistic service providers to relegate new technologies and services to that sector of the market willing to pay premium prices for such services and delay indefinitely the deployment of new cost-effective technologies for the mass market.

One simple mechanism to help speed the development of true competition in the delivery of telecommunications services is the development of an educated consumer market. Within the confines of Universal Service support for schools, libraries and health care providers, it should be possible to develop the necessary level of education in conjunction with the requirement that requests for supported telecommunications services should be bona fide, if this requirement is interpreted as demanding that bona fide requests originate from educated consumers.

To address this need Information Renaissance proposes to develop an on-line resource which will provide current information on the technology of school and community networking and current examples of best practice in the application of this technology. This resource will be constructed as an interactive and dynamical service, with an editorial staff who will respond to the changing needs of classrooms and libraries across the country.

We propose further that a small portion of the Universal Service fund be reserved for educational resources of this type, and that schools can qualify their requests for new telecommunications services by reference to such resources. On-line resources of this type could provide a self-certification mechanism by which users would consult relevant sections of the on-line resource, verify their understanding of this material through a simple interactive form and then submit their telecommunications requests to vendors in their region. The same on-line resource could be used by school districts and state departments of education in drawing up guidelines for district-level or state-wide technology planning.

From our experience in Pittsburgh we believe that simple educational measures readily yield cost-savings on the order of 10% to 20%. Indeed, we have examples of cost-savings which are considerably higher than this. Thus an investment of 1% of the Universal Service fund in educational measures of this type would be likely to yield savings which are perhaps ten times this investment. We feel that investments in educational services which can prepare school districts for their telecommunications purchases are likely to reap dividends in cost savings, in the development of sound educational programs and in the long-term sustainability of these programs and the associated technology. Furthermore, such investments meet the goal of developing an educated customer base for telecommunications services, which is likely to stimulate competition which will result in lower prices and superior services for the entire telecommunications market.

The Universal Service/Network Democracy on-line seminar discussed a number of options relating to bona fide requests. The preference of local practitioners in the seminar was clearly to minimize bureaucratic overhead in the acquisition of needed telecommunications services. For this reason, state-mandated plans, while offering a useful framework for districts to develop their local telecommunications policy, are not a popular mechanism for assuring that requests for new telecommunications services will be bona fide.

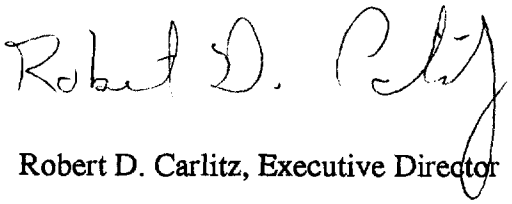
District-level planning is seen as an effective means of providing coherence to requests for service coming from individual schools. But there are two problems associated with this:

(1) Few districts have the technical expertise to choose wisely among the available commercial offerings of new telecommunications services. This makes them susceptible to "steering" on the part of vendors dominant in the market and prone to select services which may be hard to support in the long term.

(2) Examples of best practice in the educational applications of telecommunications technology are rare enough that many districts are unfamiliar with them. This makes it hard for such districts to achieve the primary goal that teachers have in the acquisition of telecommunications technology, which is to enhance the educational environment of their schools and classrooms.

The educational resource described above would address both these problems. We estimate the cost of developing such a resource to be on the order of one million dollars. Annual maintenance of such a resource would entail similar costs. Hence the 1% figure mentioned above would be sufficient to provide for the parallel development of several such resources, any one of which could be used by schools and libraries to qualify their requests for telecommunications services under the provisions of the Telecommunications Act.

Respectfully Submitted,



Robert D. Carlitz, Executive Director

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